W-MAKE · SOFTWARE FOR INDUSTRIAL PROCESSES

W-Make Recipe

The workbench for glass recipes: calculate a recipe, compare versions and pass the result on as PDF, Excel or printout.

What W-Make Recipe is for

For recipe work

Raw materials, oxide calculation, redox, batch size, cost and versions in one place.

Without shift operation

Silos, shifts and production postings are not part of it. W-Make Batch covers those.

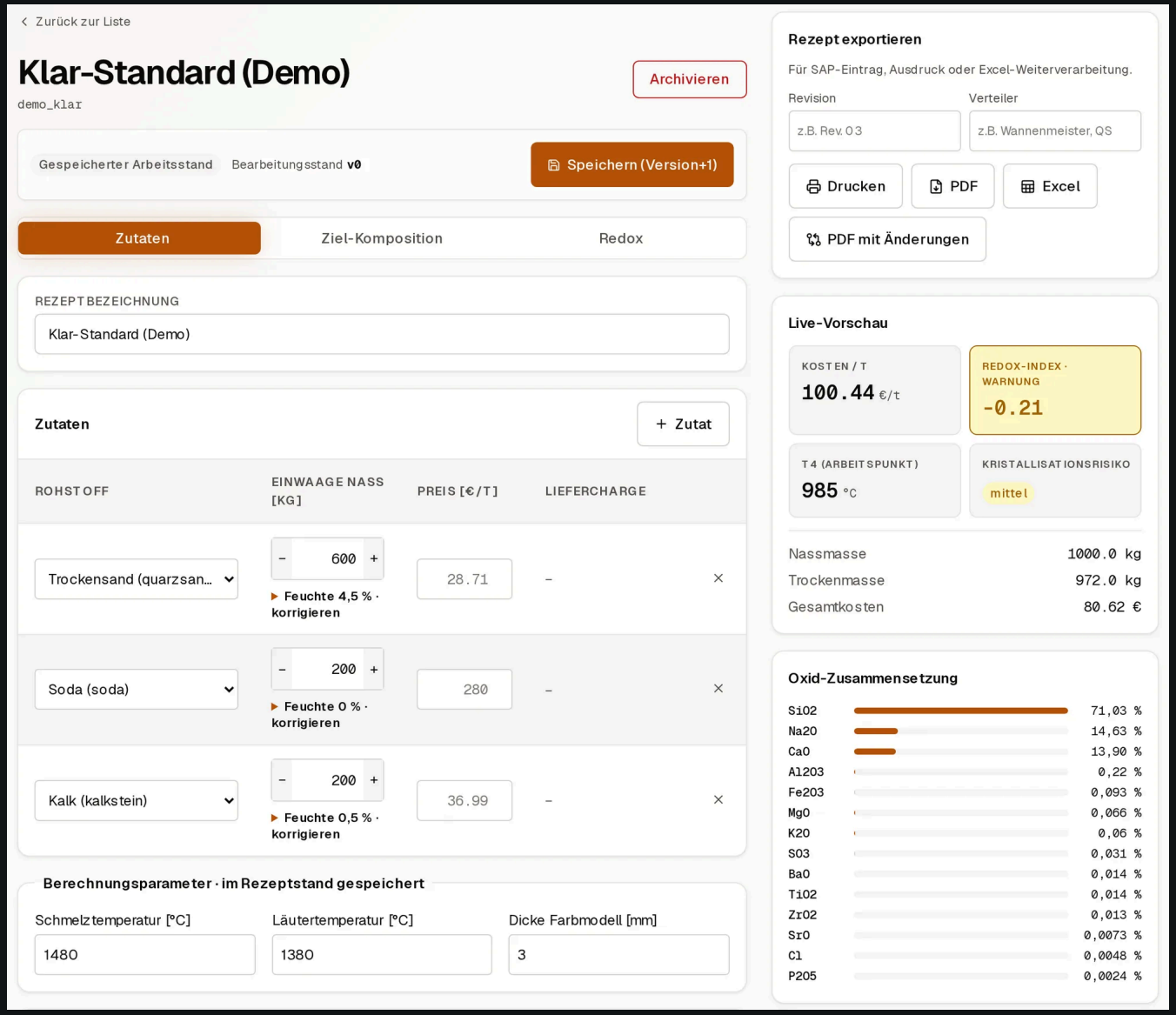
Geared to container glass

A plausibility check compares the recipe with a container-glass target profile.

Recipe and oxide balance

As you change the weights, the preview recalculates cost, redox, working point and oxide balance. The result goes out as print, PDF or Excel.

Captured in a demo copy. All values are demo data. Editor shown in its German interface.



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Start from a target composition

You enter the oxide target profile and select the available raw materials. The solver proposes matching quantities. Limits can be set per oxide and raw material.

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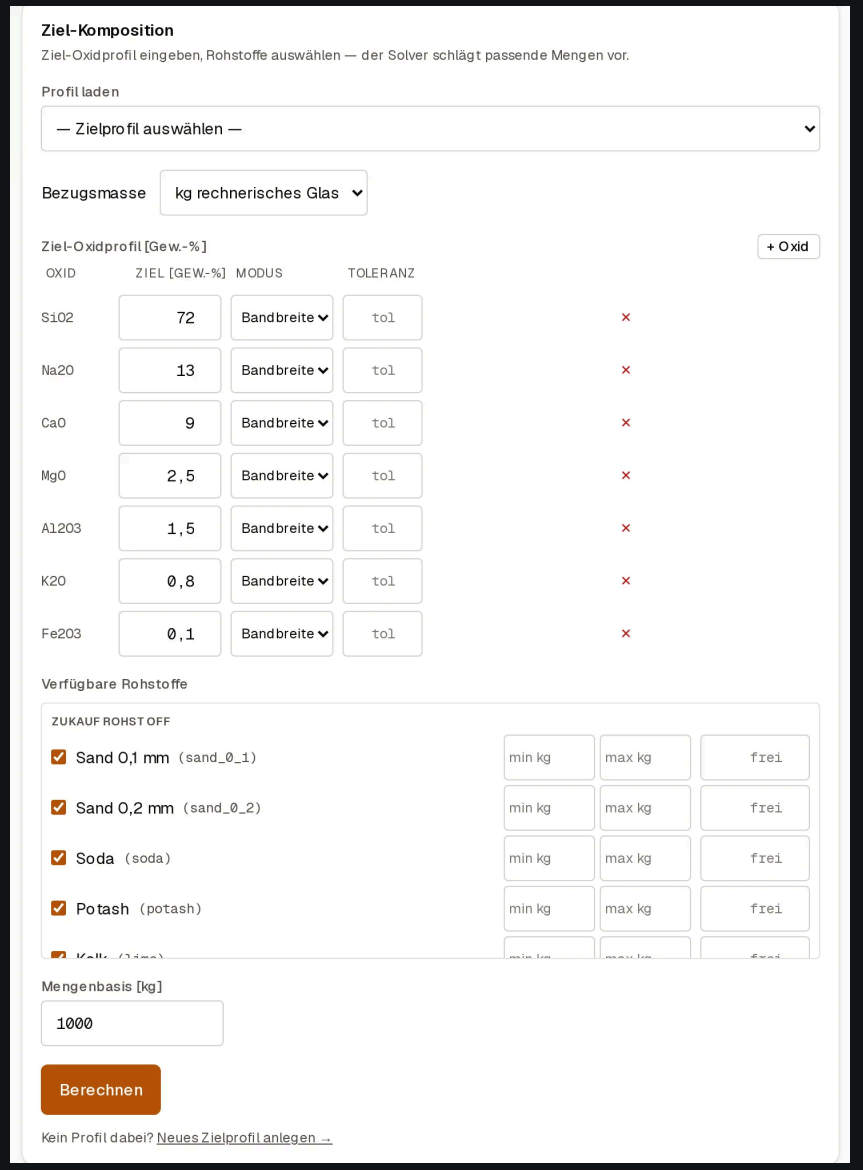

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Viscosity and glass physics

Working point, transition temperature, liquidus, viscosity points, density and durability sit next to the recipe. Estimates are labelled as such.

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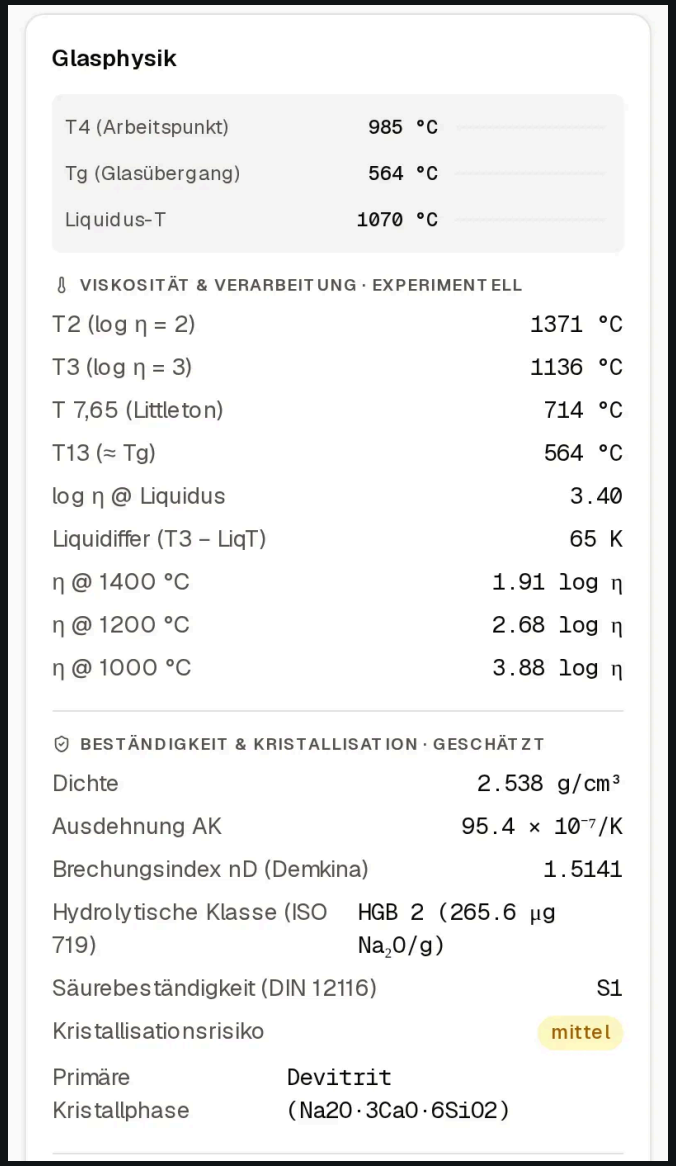

Glasphysik

T4 (Arbeitspunkt)	985 °C
Tg (Glasübergang)	564 °C
Liquidus-T	1070 °C

VISKOSITÄT & VERARBEITUNG · EXPERIMENTELL

T2 (log η = 2)	1371 °C
T3 (log η = 3)	1136 °C
T 7,65 (Littleton)	714 °C
T13 (≈ Tg)	564 °C
log η @ Liquidus	3.40
Liquidiffer (T3 – LiqT)	65 K
η @ 1400 °C	1.91 log η
η @ 1200 °C	2.68 log η
η @ 1000 °C	3.88 log η

BESTÄNDIGKEIT & KRISTALLISATION · GESCHÄTZT

Dichte	2.538 g/cm³
Ausdehnung AK	95.4 × 10^{-7}/K
Brechungsindex nD (Demkina)	1.5141
Hydrolytische Klasse (ISO 719)	HGB 2 (265.6 µg Na_2O/g)
Säurebeständigkeit (DIN 12116)	S1
Kristallisationsrisiko	mittel
Primäre Kristallphase	Devitrit (Na2O·3CaO·6SiO2)

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Redox, colour and fining

A separate area shows the calculated redox state, the colour forecast, the redox-temperature curve and the fining window. Each model is named.

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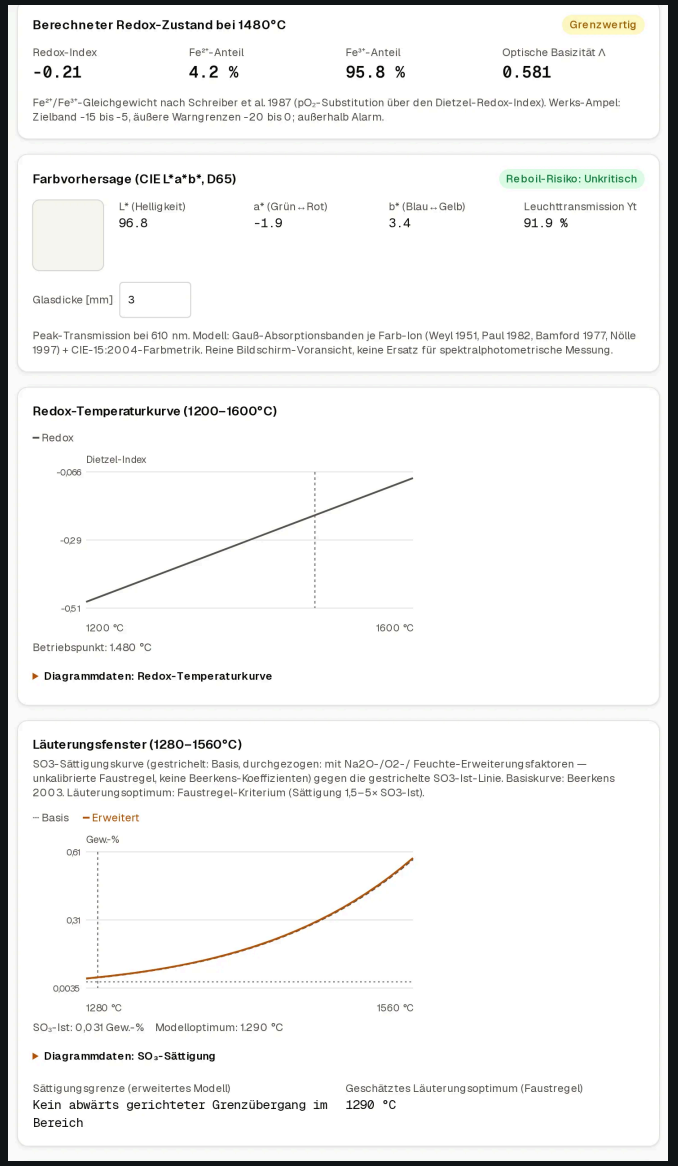

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Compare versions

Every save creates a version. The comparison sets weights, oxides and physics side by side and marks the differences.

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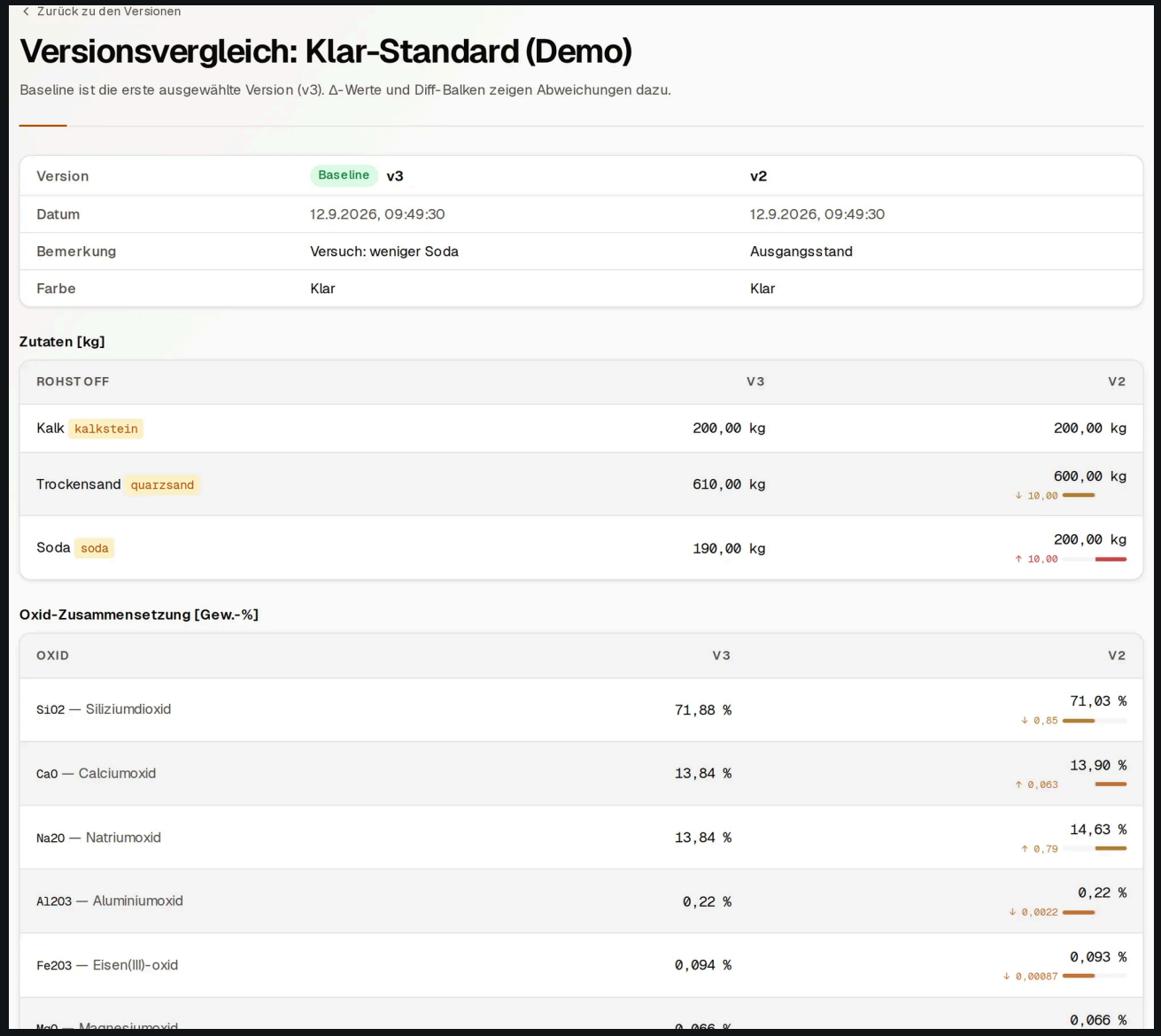

Where the calculation is not enough

Model values

Calculated properties come from published regressions. They help compare recipes.

Lab and furnace remain

They do not replace a lab analysis or a trial at the furnace.

Passing it on

Print, PDF and Excel, with an oxide table comparing actual and target.

The next step

Send me a short note on how you calculate today and which recipes you would like to compare.

- Reply within two working days
- Temporary demo access on request
- Written scope and price before work starts

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